## KODAK EKTACHROME MS Film

Long Rolls for Still-Camera Use

TYPE 5256

A color film designed for exposure by daylight, electronic flash, or blue flashbulbs. Processed by reversal, it yields color transparencies for projection or color printing.

Handling and Storage: This film should be handled in total darkness.

Exposed and unexposed film, as well as transparencies, should be stored in a cool, dry place. For best results, film should be processed as soon as possible after exposure. For more information, write for a copy of Storage and Care of KODAK Color Films (E-30) from Eastman Kodak Company, Department 454.

ASA Speed: The number given after each light source is for use with meters and cameras marked for American Standard (ASA) Speeds or Exposure Indexes.

Light Source	SPEED	WITH FILTER SUCH AS:	18.5
Daylight Photoflood Lamps	64 20	None Kodak No. 80B	
3200 K Lamps	16	Kodak No. 80A	11.6

Note: Exposure times 1/10 second or longer may require an increase in exposure to compensate for the reciprocity characteristics of this film.

Daylight Exposure Table: Lens openings with shutter at 1/100 or 1/125 second.

For the hours from 2 hours after sunrise to 2 hours before sunset.

BRIGHT OR HAZY SUN ON LIGHT SAND OR SNOW BRIGHT OR HAZY SUN (DISTINCT SHADOWS)		CLOUDY BRIGHT	HEAVY	OPEN		
		(No Shadows)	OVERCAST	SHADE*		
f/16	f/11†	f/5.6	f/4	f/4		

\*Subject shaded from the sun but lighted by a large area of clear, unobstructed sky. †f/5.6 for backlighted close-up subjects.

Fill-in Flash: Blue flashbulbs are helpful in lightening the harsh shadows usually found in making close-ups in bright sunlight. A typical exposure is f/22 at 1/25 or 1/30 second, with the subject 8 to 10 feet away. For more information about fill-in flash, see the Kodak Data Book Flash Pictures or the Kodak Master Photoguide, sold by photo dealers.

sunlight. Other light sources may not give equally good results even with the most appropriate filters. The bluish cast which is otherwise evident in pictures taken in shade under a clear blue sky can be minimized by use of the Kodak Skylight Filter, which requires no increase in exposure. This filter is also useful for reducing bluishness in pictures taken on an overcast day and in distant scenes, mountain views, sunlit snow scenes, and aerial photographs.

Long Exposures: At exposure times 1/10 second or longer, compensate for the reciprocity characteristics of this film by increasing the exposure and using Kodak Color Compensating (CC) Filters as suggested below.

Exposure Time	Exposure Time (Normal Use) 1/1000 second to 1/25 second		1 second	10 seconds	100 seconds	
Suggested Exposure Increase	None	1/3 stop	1 stop	2 stops	3 stops	
Suggested KODAK CC Filters	None	CC10C	CC20C	CC30C + CC05G	CC30C + CC10G	

**Note:** Exposure times shorter than 1/1000 second or longer than 100 seconds are not recommended for this film. The information in the table above applies only when the film is exposed to daylight illumination.

Electronic Flash Guide Numbers: This table is intended as a starting point in determining the correct guide number. The table is for use with equipment rated in beam candlepower-seconds (BCPS) or effective candlepower-seconds (ECPS). Divide the proper guide number by the flash-to-subject distance in feet to determine the f-number for average subjects. If the electronic flash unit produces transparencies which are slightly bluish, use a "warm" filter such as a Kodak Compensating Filter CC10Y to improve color balance. With this filter, increase exposure about ½ stop.

OUTPUT OF UNIT (BCPS OR ECPS)	350	500	700	1000	1400	2000	2800	4000	5600	8000
GUIDE NUMBER FOR TRIAL	32	40	45	55	65	80	95	110	130	160

Flash: For flash pictures with this film, use blue flashbulbs without a filter. With zirconium-filled clear flashbulbs (AG-1, M3, and M5), use a Kodak No. 80D Filter over camera lens. With all other clear flashbulbs, use a No. 80C Filter. Divide the proper guide numbers by the flash-to-subject distance in feet to determine the f-number for average subjects. Use ½-stop larger lens opening for dark subjects; ½-stop smaller for light subjects.

## GUIDE NUMBERS\* FOR FLASHBULBS For Blue Flashbulbs (or Clear Flashbulbs with KODAK Filter No. 80C or No. 80D)

BETWEEN- LENS SHUTTER SPEED	SYN- CHRONI- ZATION	FLASH- CUBE	AG-1B†	AG-3B†	M2B‡	M3B,‡ M5B,‡ 5B,§ 25B§	· FOCAL- PLANE SHUTTER SPEED	6B§ OR 26B§
Open, 1/25-1/30 } 1/25-1/30 1/50-1/60 1/100-1/125 1/200-1/250 1/400-1/500	X or F M M M M M M	80 55 55 45 36 28	120 80 80 70 55 45	140 100 100 80 65 50	105 NR** NR NR NR NR NR	160 150 140 120 95 70	1/25-1/30 1/50-1/60 1/100-1/125 1/200-1/250 1/400-1/500 1/1000	150 110 80 55 38 26

<sup>\*</sup>For use with bowl-shaped polished reflectors. If shallow cylindrical reflectors are used, divide these guide numbers by 2.

Bowl-Shaped Polished Reflector Sizes: †2-inch; ‡3-inch; §4- to 5-inch.

These values are intended only as guides for average emulsions. They must be changed to suit individual variations in synchronization, battery, reflector, and bulb position in the reflector.

Caution: Since bulbs may shatter when flashed, the use of a flashguard over the reflector is recommended. Do not flash bulbs in an explosive atmosphere.

Laboratory Processing: Your dealer will arrange to have this film processed by Kodak or any other laboratory offering this service.

Film price does not include processing by Kodak. Films processed by Kodak laboratories are identified by the phrase "Processed by Kodak."

## IMPORTANT PROCESSING NOTICE

The return of any film or print to us for processing or any other purpose will constitute an agreement by you that if any such film or print is damaged or lost by us or any subsidiary company, even though by negligence or other fault, it will be replaced with an equivalent amount of unexposed Kodak film and processing and, except for such replacement, the handling of such films or prints by us for any purpose is without other warranty or liability.

You Can Process the Film Yourself: Use the KODAK EKTACHROME Film Processing Kit, Process E-4. All the necessary chemicals and directions are included in this kit, sold by photo dealers.

Kodak Pamphlet No. J-7 Processing Long Rolls of Film in Spiral Reels is available on request from Eastman Kodak Company, Dept. 454.

**Notice:** This film will be replaced if defective in manufacture, labeling, or packaging, or if damaged or lost by us or any subsidiary company, even though by negligence or other fault. Except for such replacement, the sale, processing, or other handling of this film for any purpose is without other warranty or liability. Since color dyes may change in time, this film will not be replaced for, or otherwise warranted against, any change in color.

<sup>\*\*</sup>NR = Not Recommended